



RECEIVED

16 APR 21 AM 10:14

614 Magnolia Avenue  
Ocean Springs, Mississippi 39564  
Phone 228 818 9626  
Fax 228 818 9631  
www.anchorqea.com

## MEMORANDUM

SUPERFUND DIV  
REMEDIAL BRANCH  
(CSF-R)

---

|  |                              |
|--|------------------------------|
| <b>To:</b> Gary Miller and Anne Foster<br>U.S. Environmental Protection Agency   | <b>Date:</b> April 18, 2016  |
| <b>From:</b> Wendell Mears, David Keith, John Verduin,<br>John Laplante, Holly Samaha, and Rick Coupe<br>Anchor QEA, LLC | <b>Project:</b> 150557-01.01 |
| <b>Cc:</b> Dave Moreira, MIMC<br>Phil Slowiak, IP  |                              |
| <b>Re:</b> San Jacinto River Waste Pits TCRA Armored Cap Probing and Maintenance<br>Completion Report                    |                              |

---

### INTRODUCTION

This document provides a summary of visual inspection, probing, and maintenance activities completed within the Eastern Cell of the armored cap installed as part of the Time Critical Removal Action (TCRA) at the San Jacinto River Waste Pits Superfund Site (Site). The TCRA was implemented by the Respondents, International Paper Company and McGinnes Industrial Maintenance Corporation (collectively, Respondents), under an Administrative Settlement Agreement and Order on Consent (AOC) with the U.S. Environmental Protection Agency (USEPA) – Docket No. 06-12-10, effective May 17, 2010 (USEPA 2010).

The inspection, probing, and maintenance activities described in this report took place pursuant to USEPA-approved work plans and the approved Operations, Monitoring, and Maintenance Plan (OMM Plan) for the TCRA. These activities commenced with a low-tide visual inspection conducted on behalf of Respondents by Anchor QEA, LLC (Anchor QEA) staff on February 24, 2016. This inspection was conducted in response to a request from USEPA on February 23, 2016, that the Respondents conduct an inspection on February 24, 2016, to take advantage of extremely low tides in the area of the armored cap. The visual inspection found that virtually all of the Eastern Cell was covered by the required armoring stone, but identified five small areas of exposed geotextile within the Eastern Cell. Maintenance activities to place additional rock over the areas identified during the February 23, 2016, low-tide visual inspection occurred on March 10, 14, and 15, 2016.

---

9689092



The Respondents performed additional visual inspections and probing of the armored cap in the Eastern Cell on March 16–19 and 21, 2016. These activities included probing that was conducted pursuant to an USEPA-approved Probing Work Plan and a second visual inspection of the armored cap that was performed on Saturday, March 19, 2016, during an extended low-tide event. These inspections revealed additional maintenance areas where either geotextile fabric was exposed or sufficient cap thickness could not be verified. These additional areas were addressed between March 22 and March 31, 2016. Type C gradation rock, as specified and used during the TCRA, was used for all maintenance activities. Except for March 19, 2016 (when the second low-tide inspection was conducted) and March 31, 2016, when the maintenance effort was completed and the team demobilized, the activities described above were completed with USEPA representatives present.

The following provides details of the cap inspection, probing, and maintenance activities.

## **CAP INSPECTION, PROBING, AND MAINTENANCE ACTIVITIES**

### **Low-tide Visual Inspection – Wednesday, February 24, 2016**

Taking advantage of exceptionally low tides in the area of the armored cap, engineering staff from Anchor QEA, on behalf of the Respondents, were able to observe large portions of the cap in the Eastern Cell and conduct a visual inspection on February 24, 2016. The inspection included many areas that are normally under water. During this inspection, five small areas of exposed geotextile (from 1 foot × 1 foot up to 2 feet × 3 feet) were observed, and their locations were recorded with photographs and in the field notes. These locations, along with the areas identified during subsequent probing and low-tide investigation activities, are shown on Figure 1.

### **Initial Maintenance Event – Thursday, March 10, 2016, and Monday, March 14, 2016, through Tuesday, March 15, 2016**

#### ***Mobilization and Preparation for Maintenance Activities***

The Respondents engaged Benchmark Ecological Services, Inc., one of the on-call contractors identified in the TCRA OMM Plan, to perform the required maintenance on the areas identified during the February 24, 2016, low-tide visual survey. Anchor QEA and USEPA provided oversight for all Site activities. Maintenance pre-mobilization activities included reviewing the Site Health and Safety Plan; the access plan and insurance

---

certificates; coordinating with the Texas Department of Transportation; arranging for the contractor, materials, and equipment; and notifying the USEPA of the field schedule.

Following mobilization to the TCRA Site, the locations identified during the February 24, 2016, visual inspection were identified and probed with PVC pipes and a ½ inch × 10 foot steel rebar to confirm and physically mark the limits of the maintenance areas with anchored floats. Approximately 18 cubic yards of Type C gradation armor stone from the material stockpiled as part of the TCRA OMM Plan were transported to the Site for use during the maintenance activities.

### ***Maintenance Activities***

Maintenance activities began each day with a tailgate safety meeting for all personnel. See the Daily Reports (Attachment 1) for a complete list of personnel on-site and activities performed each day. The maintenance contractor utilized a small pontoon barge to transport the armor stone from the location on the shoreline where it was temporarily stockpiled to each of the maintenance locations. A skid steer was used to transfer the armor stone from the temporary on-site stockpile to the pontoon barge. After the pontoon barge was loaded with armor stone, the stone was floated to the respective maintenance locations and placed in the prescribed areas until sufficient cap thickness was achieved. The maintenance area locations are shown on Figure 1. Each location was then reprobed to confirm coverage of the exposed geotextile and that a minimum cap thickness was present of at least 1 foot of armor stone in Areas A and C of the Eastern Cell and at least 1.5 feet of armor stone in Area D of the Eastern Cell.

### **Probing and Low-tide Visual Inspection – Wednesday, March 16, 2016, through Saturday, March 19, 2016, and Monday, March 21, 2016**

The Respondents proposed a cap thickness probing evaluation of the Eastern Cell in a Probing Work Plan (Attachment 2) that was submitted to USEPA on March 15, 2016. USEPA approved the Probing Work Plan in an email (Attachment 3) dated March 15, 2016. The Probing Work Plan identified approximately 450 locations to be probed. Data from these locations were to be collected to supplement the original post-TCRA construction cap thickness verification dataset. The work required by the Probing Work Plan began on March 16, 2016. Figure 1 depicts the locations that were probed in accordance with the

---

probing grid shown in the Probing Work Plan. The probing locations were accessed via wading (where water depths were sufficiently shallow) from the pontoon barge (in intermediate depths) and from a 20-foot boat (in the deeper locations). The same ½ inch × 10 foot steel rebar probe rod used to identify the original maintenance areas was utilized for confirmation probing. In deeper locations, a 20-foot steel rebar rod was secured to the original probe rod in order to provide additional reach.

The field team executed the probing by proceeding to each location utilizing a Differential Global Positioning System (DGPS) unit with preloaded coordinates, establishing the water depth in the immediate area of the probing location, and then working the probe rod through the cap material to either the geotextile beneath the armor stone or until refusal was encountered. After locating each probing point, several attempts were made to contact the geotextile layer beneath the armor rock with the probe rod. In many instances, the field team was unable to penetrate the armored cap even after several attempts.

During a low-tide visual inspection of the Eastern Cell that was conducted on Saturday, March 19, 2016, the voids between individual stones in the armor rock were observed to be filled with shells, shell hash, and shell debris, making penetration through this layer difficult or impossible. Photographs providing examples of typical shell and debris encountered are shown in Photographs 1 through 4 in Attachment 4. Similarly, areas of the armored cap consisting of Type A rock were difficult to penetrate due to the cemented nature of the mixture of fine aggregates and recycled concrete used in these areas. Photographs of the cement-like structure described above are shown on Photographs 5 through 8 in Attachment 4. Additional visual and probing inspections, and additional observations made by digging into the armored cap with a shovel at a subset of locations indicated where there was either significant biological growth and/or natural cementation within the cap and that there has not been disturbance of the armor material. Daily reports of this probing and low-tide visual inspection event are included in Attachment 1.

The probing and second low-tide event visual inspection on March 19, 2016, identified approximately eight additional areas of exposed geotextile and/or insufficient armor rock thickness within the Eastern Cell. These areas were recorded in the field utilizing a DGPS

---



unit and marked for maintenance. The areas varied in size from 1 to 50 square feet, with more than half of the areas being less than 5 square feet. These areas are shown on Figure 1.

### **Second Maintenance Event – Tuesday, March 22, 2016 through Friday, March 25, 2016, and Thursday, March 31, 2016**

The second maintenance event addressed the areas identified by the March 16–19 and March 21, 2016, probing and low-tide inspection. It began on March 22, 2016, and was conducted in accordance with the Armored Cap Maintenance Work Plan submitted to USEPA and approved on March 21, 2016 (Attachments 5 and 6). During this maintenance event, additional areas of exposed geotextile and/or areas of insufficient armor rock thickness were identified and reported to the USEPA personnel on-site. Verbal approval was obtained from USEPA to add these locations to the ongoing maintenance activities. All maintenance was completed as approved by placing stone in the maintenance areas until sufficient cap thickness could be confirmed. Each area was then reprobod to confirm adequate cap thickness had been achieved. The maintenance area locations were recorded using a DGPS survey unit. The blue dots on Figure 1 illustrate the areas where additional rock was placed during the maintenance event. Approximately 170 square feet of the cap area in the Eastern Cell (consisting of a total of 369,000 square feet) were serviced during the second maintenance event. Daily reports of this maintenance event are included in Attachment 1.

### ***Demobilization***

Following the conclusion of the maintenance event, all supplies and equipment were removed from the Site. Small stockpiles of Type C armor stone remain on-site for future maintenance, if needed.

## **FIGURES**

Figure 1 – Armored Cap Probing and Maintenance Locations

## **ATTACHMENTS**

Attachment 1 – Armored Cap Probing and Maintenance Daily Reports

Attachment 2 – Respondents' March 15, 2016, Probing Work Plan

Attachment 3 – USEPA March 16, 2016, Probing Plan Approval

Attachment 4 – March 19, 2016, Low-tide Visual Inspection Photographic Log

---

Attachment 5 – Respondents' March 21, 2016, Armored Cap Maintenance Work Plan

Attachment 6 – USEPA March 21, 2016, Armored Cap Maintenance Work Plan Approval

## REFERENCES

USEPA (U.S. Environmental Protection Agency), 2010. *Administrative Settlement Agreement and Order on Consent for Removal Action*. U.S. Environmental Protection Agency Region 6 CERCLA Docket No. 06-03-10. In the matter of: San Jacinto River Waste Pits Superfund Site Pasadena, Harris County, Texas. International Paper Company and McGinnes Industrial Management Corporation, Respondents.

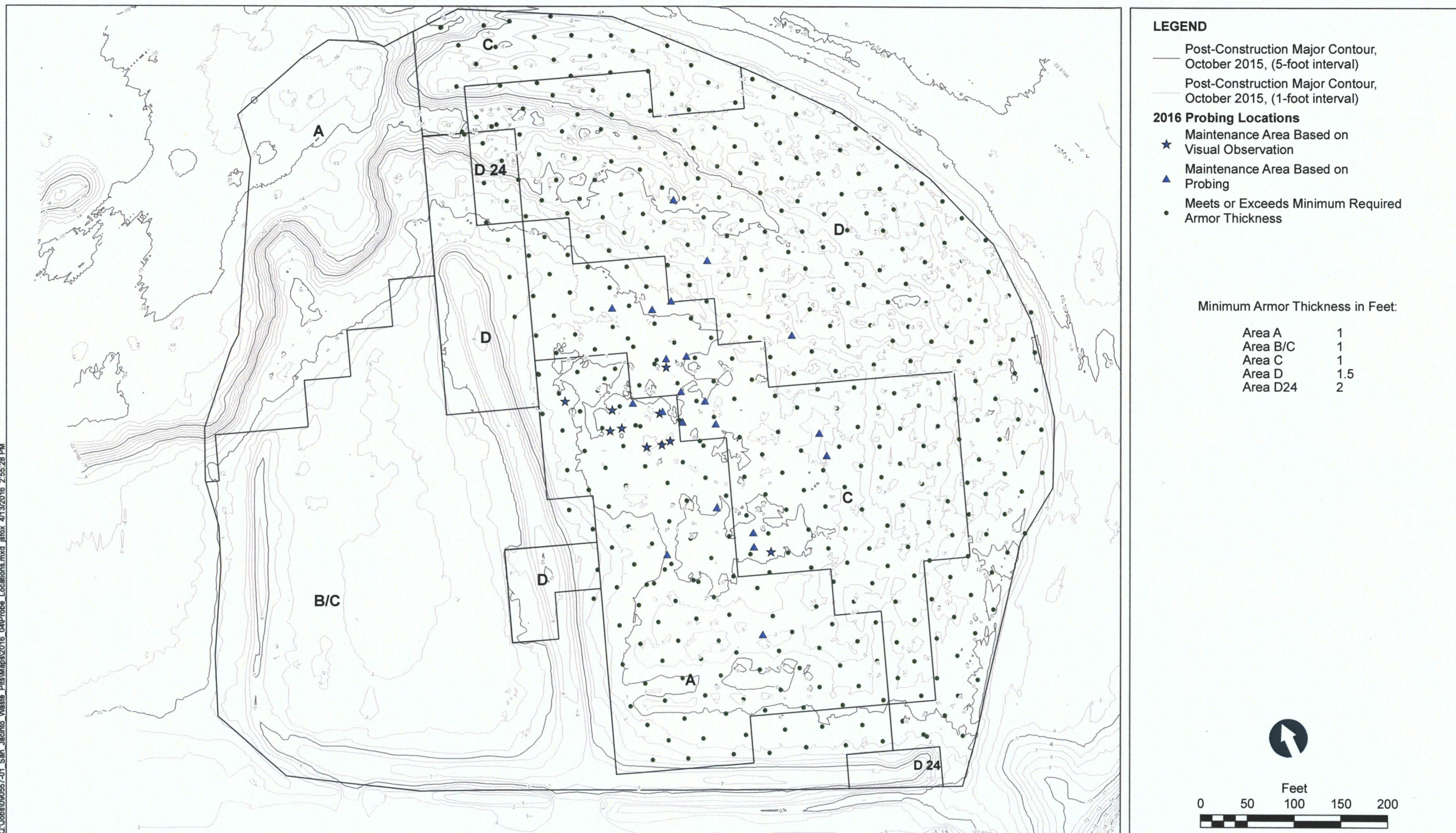
---

## FIGURE

---



Q:\Jobs\090557-01 San Jacinto Waste Pits\Maps\2016\_04\Probe Locations.mxd ifox 4/13/2016 2:55:28 PM





**ATTACHMENT 1**  
**ARMORED CAP PROBING AND**  
**MAINTENANCE DAILY REPORTS**

---



## DAILY REPORT

PAGE 1 OF 5

|   |  |  |                       |                       |
|---|--|--|-----------------------|-----------------------|
| <b>PROJECT</b>  | San Jacinto River Waste Pits TCRA Maintenance              |  | <b>CONTRACT NO.</b>   |                       |
| <b>CONTRACTOR</b>   | Benchmark Ecological Services, Inc.<br>USA Environment, LP |  | <b>SUPERINTENDENT</b> | N/A                   |
| <b>DAY OF WEEK &amp; DATE:</b>  | Thursday, March 10, 2016                                   |  | <b>REPORT NO.</b>     | 001                   |
| <b>WEATHER</b>  | Overcast, light rain                                       |  | <b>TEMPERATURE</b>    | L: 66 H: 73 degrees F |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b>  |  | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                       |                       |
| 3 – Benchmark Ecological Services<br>3 – USA Environment  |  | None   |                       |                       |
| <b><u>TIDE INFORMATION:</u></b>   |  | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                       |                       |
| Time: n/a      Height: n/a  |  | No incidents or near misses on this date.                |                       |                       |
| <b><u>CHRONOLOGICAL ACCOUNT OF DAY'S WORK:</u></b>  |  |  |                       |                       |
| <p>0915 – Anchor QEA arrived at boat ramp. Benchmark Ecological Services (Benchmark) assessed water levels at the Site.</p> <p>0920 – USEPA arrived at boat ramp.</p> <p>0925 – Benchmark returned to boat ramp. Health and safety meeting.</p> <p>1000 to 1130 – Probed with PVC poles for areas in Eastern Cell with exposed geotextile or armor rock coverage less than 1' thick. Marked all locations with a weight and buoy system and took GPS coordinates.</p> <p>1145 to 1305 – Took a break for lunch and a trip to Lowe's for rebar and other probing supplies.</p> <p>1315 to 1450 – Determined extent of armor rock thickness less than 1' around each previously identified location.</p> <p>1410 – USA Environment delivered truckload of Type C armor rock to Site.</p> <p>1500 – Arrived back at boat ramp. Anchor QEA, USEPA, and Benchmark verified plans to continue work early next week pending agreeable weather and tide levels.</p> <p>1520 – Anchor QEA, Benchmark, and USEPA departed from boat ramp.</p> <p>1525 – H. Samaha traveled to the Site access gate to check on armor rock delivery from the land. A car began following her along the way. She stopped before the gate and remained in her car to see if the vehicle would leave the area. Since the car did not leave, H. Samaha left the Site.</p> <p>1548 – H. Samaha returned to the Site access gate and saw that it was unlocked. She properly locked the gate while on the phone with W. Mears, and then she left the Site area.</p> |  |  |                       |                       |
| <b><u>Summary of Progress on this Date:</u></b>   |  |  |                       |                       |
| <ul style="list-style-type: none"><li>• Delineated maintenance areas in Eastern Cell</li><li>• Transported Type C armor rock to Site</li></ul>  |  |  |                       |                       |

**DAILY REPORT**PAGE 2 OF 5**Persons Onsite on this Date:**

Holly Samaha (Anchor QEA)

Gary Miller (USEPA)

Matthew Jay, Robert Moleski, Kevin (Benchmark)

USA Environment Crew

**Material Delivery Summary as of this Date:**

| Material | Units       | Delivered (units) | Delivery Verification Method | Preceding Delivered Total | Total Delivered for Project |
|----------|-------------|-------------------|------------------------------|---------------------------|-----------------------------|
| Type C   | cubic yards | 18-20             | Truck bed measure            | 0                         | 18-20                       |

**TESTS PERFORMED:**

None

**PHONE LOG:**

1127 – Call with W. Mears to discuss probing progress and tide levels. Determined need for 10-12' pieces of rebar to reach geotextile layer to determine armor rock thickness.

1503 – Call with W. Mears to discuss daily events and plans for the remaining maintenance.

1530 and 1548 – Call with W. Mears to discuss inability to check on armor rock delivery.

1554 – Call with D. Keith and W. Mears to discuss daily activities and plans for the remaining maintenance.

**SITE PHOTOS/VIDEOS TAKEN: (attached below)**

Five photographs with captions

**FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:**

None

QA REPRESENTATIVE

Holly Samaha

HRS

7

DATE

3/10/2016



Photograph 1 – Probing in Eastern Cell (view northeast).



Photograph 2 – Weights and floats marking locations without 1' armor rock above the geotextile layer (view southeast).





Photograph 3 – Western Cell during high water levels (view south).



Photograph 4 – Type C armor rock being delivered to Site (view south).





Photograph 5 – Marking extent of maintenance areas.

**DAILY REPORT**PAGE 1 OF 4

|  |   |  |                     |                      |
|--|---|--|---------------------|----------------------|
| <b>PROJECT</b>   | San Jacinto River Waste Pits TCRA Maintenance |  | <b>CONTRACT NO.</b> |                      |
| <b>CONTRACTOR</b>  | Benchmark Ecological Services, Inc.           | <b>SUPERINTENDENT</b>                                    | N/A                 |                      |
| <b>DAY OF WEEK &amp; DATE:</b>   | Monday, March 14, 2016                        |  | <b>REPORT NO.</b>   | 02                   |
| <b>WEATHER</b>   | Overcast morning, sunny afternoon             |  | <b>TEMPERATURE</b>  | L: 63 H 81 degrees F |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b>   |   | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                     |                      |
| 3 – Benchmark Ecological Services  |   | 1 skid steer   |                     |                      |
| <b><u>TIDE INFORMATION:</u></b>  |   | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                     |                      |
| Time: n/a      Height:      n/a  |   | No incidents or near misses on this date                 |                     |                      |
| <b><u>CHRONOLOGICAL ACCOUNT OF DAY'S WORK:</u></b>   |   |  |                     |                      |
| <p>0730 – Anchor AEA and Benchmark Ecological Services (Benchmark) onsite</p> <p>0740 – Benchmark constructs ramp to slide pontoon boat in and out of the water to load armor rock.</p> <p>0750 – H Samaha realigns warning signs to face outward towards the San Jacinto River.</p> <p>0900 – G. Miller (USEPA) onsite.</p> <p>0905 – M Jay (Benchmark) arrives with skid steer</p> <p>0910 – Health &amp; safety meeting and discuss daily plans</p> <p>0915 – R Moleski arrives to Site with the two boats</p> <p>1000 – Begin probing and placement of Type C armor rock in East Cell While wading, Benchmark identified small area in the southern portion of East Cell with exposed geotextile (MA 7). Placed armor rock in MA 4 and MA 7</p> <p>1340 to 1410 – Lunch break</p> <p>1410 to 1740 – Resume armor rock placement in MA 1, MA 2, MA 3, and MA 4</p> <p>1750 – Stage pontoon boat and skid steer onsite for overnight.</p> <p>1805 – USEPA offsite.</p> <p>1815 – Anchor QEA and Benchmark offsite.</p> |   |  |                     |                      |
| <b><u>Summary of Progress on this Date:</u></b>  |   |  |                     |                      |
| <ul style="list-style-type: none"><li>Continued probing and began placement of Type C armor rock in East Cell maintenance areas</li></ul>  |   |  |                     |                      |



## DAILY REPORT

PAGE 2 OF 4

**Persons Onsite on this Date:**

Holly Samaha (Anchor QEA)

Gary Miller (USEPA)

Matthew Jay, Robert Moleski, Kevin Kicheline (Benchmark)

**Material Delivery Summary as of this Date:**

| Material | Units       | Delivered (units) | Delivery Verification Method | Preceding Delivered Total | Total Delivered for Project |
|----------|-------------|-------------------|------------------------------|---------------------------|-----------------------------|
| Type C   | cubic yards | 0                 | Truck bed measure            | 18-20                     | 18-20                       |

**TESTS PERFORMED:**

None

**PHONE LOG:**

0822 – Call with G. Miller about arrival to Site.

1156 – Call with W. Mears about maintenance progress.

1718 – Call with D. Keith about daily progress and maintenance schedule.

**SITE PHOTOS/VIDEOS TAKEN: (attached below)**

Three photographs with captions

**FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:**

None

QA REPRESENTATIVE

Holly Samaha

HRS

10.75

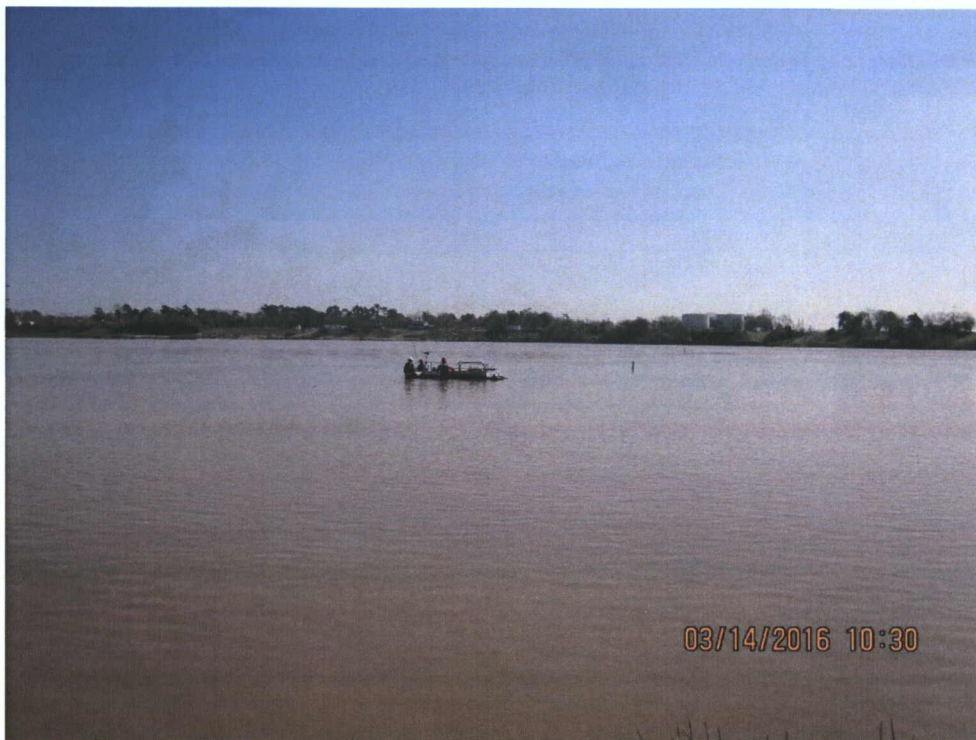
DATE

3/14/2016





Photograph 1 – Placing armor rock in maintenance area.



Photograph 2 – Loading rock onto pontoon barge for placement in Eastern Cell.





Photograph 3 – Rock placement proceeding from pontoon barge.



## DAILY REPORT

PAGE 1 OF 4

|  |   |  |                       |                       |
|--|---|--|-----------------------|-----------------------|
| <b>PROJECT</b>   | San Jacinto River Waste Pits TCRA Maintenance |  | <b>CONTRACT NO.</b>   |                       |
| <b>CONTRACTOR</b>  | Benchmark Ecological Services, Inc            |  | <b>SUPERINTENDENT</b> | N/A                   |
| <b>DAY OF WEEK &amp; DATE:</b>   | Tuesday, March 15, 2016                       |  | <b>REPORT NO.</b>     | 03                    |
| <b>WEATHER</b>   | Sunny   |  | <b>TEMPERATURE</b>    | L: 68 H: 84 degrees F |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b>   |   | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                       |                       |
| 3 – Benchmark Ecological Services  |   | 2 skid steers  |                       |                       |
| <b><u>TIDE INFORMATION:</u></b>  |   | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                       |                       |
| Time: n/a      Height:      n/a  |   | No incidents or near misses on this date                 |                       |                       |
| <b><u>CHRONOLOGICAL ACCOUNT OF DAY'S WORK:</u></b>   |   |  |                       |                       |
| <p>0800 – Anchor QEA, Benchmark Ecological Services (Benchmark), and USEPA at Site.</p> <p>0810 – Health &amp; safety meeting and discuss daily plans</p> <p>0825 – Benchmark begins probing and wading around East Cell without pontoon boat because the tide was too low for its use. Found area south of previous probing with exposed geotextile (MA 5). Further probing determined that exposed geotextile is an overlap because there is armor rock beneath. Benchmark delineated the area with GPS coordinates.</p> <p>0900 – Probed near MA 1 &amp; MA 2 and located the missing exposed geotextile location previously identified on 2/24/2016. This location will be referred to as MA 6.</p> <p>0930 to 1115 – Transport Type C armor rock to maintenance areas with skid steer. Armor rock was placed in MA 1, MA 2, and MA 6.</p> <p>1115 – Skid steer moved towards MA 5 and got stuck in cap material.</p> <p>1135 – M. Jay and R. Moleski offsite to pick up additional equipment to help unlodge the skid steer.</p> <p>1230 – R. Coupe onsite. H. Samaha debriefs R. Coupe of maintenance activities.</p> <p>1250 – USA Environment onsite to determine plan for placing security cameras next week.</p> <p>1325 – Benchmark personnel return to Site with large skid steer and begin attempt to tow the skid steer stuck in the East Cell.</p> <p>1355 – H. Samaha and USA Environment offsite.</p> <p>1520 – Benchmark personnel recommence loading pontoon boat with rock for placement at location MA 7.</p> <p>1615 – Rock placement completed in Eastern Cell.</p> |   |  |                       |                       |



## DAILY REPORT

PAGE 2 OF 4

1735 – Absorbent boom and silt curtain placed around disabled skid steer

1750 – All personnel depart Site

### Summary of Progress on this Date:

- Completed placement of Type C armor rock in all identified maintenance areas in Eastern Cell

### Persons Onsite on this Date:

Holly Samaha, Rick Coupe (Anchor QEA)

Gary Miller (USEPA)

Matthew Jay, Robert Moleski, Kevin Kicheline (Benchmark)

USA Environment Personnel (3)

### Material Delivery Summary as of this Date:

| Material | Units       | Delivered (units) | Delivery Verification Method | Preceding Delivered Total | Total Delivered for Project |
|----------|-------------|-------------------|------------------------------|---------------------------|-----------------------------|
| Type C   | cubic yards | 0                 | Truck bed measure            | 18-20                     | 18-20                       |

**TESTS PERFORMED:** None

### PHONE LOG:

0832, 0912 – Calls with W Mears to discuss MA 5, MA 6, and plan to transport armor rock without pontoon boat to maintenance areas during low tide.

1113, 1130 – Calls with W Mears to discuss skid steer stuck in East Cell

1313 – Call with W. Mears to discuss USA Environment's plan for positioning the security cameras next week

### SITE PHOTOS/VIDEOS TAKEN: (attached below)

Three photographs with captions

### FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:

None

|                   |              |     |      |      |           |
|-------------------|--------------|-----|------|------|-----------|
| QA REPRESENTATIVE | Holly Samaha | HRS | 6.25 | DATE | 3/15/2016 |
| QA REPRESENTATIVE | Rick Coupe   | HRS | 5.5  | DATE | 3/15/2016 |





Photograph 1 – Placing armor rock in maintenance area.



Photograph 2 – Loading rock onto pontoon barge for placement in Eastern Cell.





Photograph 3 – Rock placement proceeding from pontoon barge.

**DAILY REPORT**PAGE 1 OF 4

|  |   |  |                     |                       |
|--|---|--|---------------------|-----------------------|
| <b>PROJECT</b>                                     | San Jacinto River Waste Pits TCRA Maintenance |  | <b>CONTRACT NO.</b> |                       |
| <b>CONTRACTOR</b>                                  | Benchmark Ecological Services, Inc            | <b>SUPERINTENDENT</b>                                    | N/A                 |                       |
| <b>DAY OF WEEK &amp; DATE:</b>                     | Wednesday, March 16, 2016                     |  | <b>REPORT NO.</b>   | 04                    |
| <b>WEATHER</b>                                     | Fog in the Morning, Sunny in the Afternoon    |  | <b>TEMPERATURE</b>  | L: 68 H: 81 degrees F |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b>     |   | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                     |                       |
| 3 – Benchmark Ecological Services<br>3 – Dorskocil |   | 2 skid steers, PC 200 Excavator                          |                     |                       |
| <b><u>TIDE INFORMATION:</u></b>                    |   | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                     |                       |
| Time: n/a      Height:      n/a                    |   | No incidents or near misses on this date.                |                     |                       |

**CHRONOLOGICAL ACCOUNT OF DAY'S WORK:**

0700 – Anchor QEA, Benchmark Ecological Services (Benchmark), and USEPA at Site

0730 – Health & safety meeting and discuss daily plans

0745 – B. Johnston (Dorskocil) onsite to assess stuck skid steer.

0820 to 1050 – Benchmark commences probing and wading around East Cell without pontoon boat due to low tide conditions.

1030 – Attempt to dislodge stuck skid steer with second skid steer is unsuccessful.

1100 – B Johnston offsite to coordinate delivery of additional machinery to remove skid steer.

1115 to 1250 – Continued probing of the East Cell

1250 to 1400 – Break for lunch.

1410 to 1530 – Continued probing of the East Cell.

1615 – Dorskocil onsite with PC 200 excavator to remove skid steer from East Cell.

1700 – Skid steer dislodged and placed on trailer for transport offsite

1715 – Benchmark probe of area where skid steer was stuck. Initial findings show displaced rock in the area of initial loss of traction. Path of skid steer removal from the East Cell appears to be normal Team to perform visual inspection at low tide on morning of 3/17.

1725 to 1800 – Continued probing of the East Cell from pontoon barge due to high tide.

1830 – All personnel depart from Site for the day.



## DAILY REPORT

PAGE 2 OF 4

### Summary of Progress on this Date:

- Removed skid steer from East Cell
- Probed approximately 160 points in East Cell

### Persons Onsite on this Date:

Rick Coupe (Anchor QEA)

Gary Miller (USEPA)

Matthew Jay, Robert Moleski, Kevin Kicheline (Benchmark)

Doskocil (3)

### Material Delivery Summary as of this Date:

| Material | Units       | Delivered (units) | Delivery Verification Method | Preceding Delivered Total | Total Delivered for Project |
|----------|-------------|-------------------|------------------------------|---------------------------|-----------------------------|
| Type C   | cubic yards | 0                 | Truck bed measure            | 18-20                     | 18-20                       |

**TESTS PERFORMED:** None

### PHONE LOG:

0741, 0750, 1036, 1402, 1554 – Calls with W. Mears to discuss progress of skid steer removal and probing activities

0744, 1540 – Calls with B. Johnston to discuss removal of skid steer and upcoming buoy placement activities

### SITE PHOTOS/VIDEOS TAKEN: (attached below)

Three photographs with captions

### FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:

None

|                   |            |     |      |      |           |
|-------------------|------------|-----|------|------|-----------|
| QA REPRESENTATIVE | Rick Coupe | HRS | 11.5 | DATE | 3/16/2016 |
|-------------------|------------|-----|------|------|-----------|





Photograph 1 – Probing activities in the East Cell.



Photograph 2 – Pontoon barge probing in Eastern Cell.





Photograph 3 – Probing activities proceeding from pontoon barge.

**DAILY REPORT**PAGE 1 OF 4

|   |   |  |                     |                       |
|---|---|--|---------------------|-----------------------|
| <b>PROJECT</b>  | San Jacinto River Waste Pits TCRA Maintenance |  | <b>CONTRACT NO.</b> |                       |
| <b>CONTRACTOR</b>   | Benchmark Ecological Services, Inc.           | <b>SUPERINTENDENT</b>                                    | N/A                 |                       |
| <b>DAY OF WEEK &amp; DATE:</b>  | Thursday, March 17, 2016                      |  | <b>REPORT NO.</b>   | 05                    |
| <b>WEATHER</b>  | Overcast with variable winds from the South   |  | <b>TEMPERATURE</b>  | L: 68 H: 81 degrees F |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b>  |   | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                     |                       |
| 3 – Benchmark Ecological Services<br>2 – Dorskocil  |   | 2 skid steers  |                     |                       |
| <b><u>TIDE INFORMATION:</u></b>   |   | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                     |                       |
| Time: n/a      Height: n/a  |   | No incidents or near misses on this date.                |                     |                       |
| <b><u>CHRONOLOGICAL ACCOUNT OF DAY'S WORK:</u></b>  |   |  |                     |                       |
| <p>0700 – Anchor QEA, Benchmark Ecological Services (Benchmark), and USEPA at Site</p> <p>0715 – Health &amp; safety meeting and discuss daily plans</p> <p>0730 to 1000 – Benchmark continues probing East Cell from pontoon boat</p> <p>0815 – Benchmark removes disabled skid steer from site for return to Sunbelt</p> <p>1000 to 1100 – Low tide visual inspection of area where skid steer was stuck. Inspection reveals depression where disabled skid steer was located but geotextile liner appears to be intact. Benchmark plans to conduct final manual inspection of area during low tide event on the morning of 3/18.</p> <p>1120 – Break for lunch and team call concerning probing techniques and notes</p> <p>1215 – Dorskocil on Site to commence placement of anchor location marker buoys</p> <p>1245 to 1400 – Benchmark continues probing East Cell from pontoon boat.</p> <p>1410 – Break from probing.</p> <p>1420 – Dorskocil completes placement of anchor location marker buoys</p> <p>1420 to 1610 – Benchmark continues probing East cell from pontoon boat</p> <p>1430 – Update G. Miller on progress of probing and buoy placement activities.</p> <p>1620 to 1650 – Benchmark continues probing East Cell from pontoon boat</p> <p>1650 – Benchmark probing crew completes probing activities for the day</p> <p>1730 – All personnel depart from the Site for the day.</p> |   |  |                     |                       |



## DAILY REPORT

PAGE 2 OF 4

### Summary of Progress on this Date:

- Removed both skid steers from Site
- Probed approximately 180 points in East Cell.
- Placed 17 anchor location marker buoys

### Persons Onsite on this Date:

Rick Coupe (Anchor QEA)

Gary Miller (USEPA)

Matthew Jay, Robert Moleski, Kevin Kichline (Benchmark)

Doskocil (2)

### Material Delivery Summary as of this Date:

| Material | Units       | Delivered (units) | Delivery Verification Method | Preceding Delivered Total | Total Delivered for Project |
|----------|-------------|-------------------|------------------------------|---------------------------|-----------------------------|
| Type C   | cubic yards | 0                 | Truck bed measure            | 18-20                     | 18-20                       |

**TESTS PERFORMED:** None

### PHONE LOG:

0907, 0948 – Calls with D Keith to discuss progress of probing activities and probing notations

0920, 1321, 1420 – Calls with B Johnston to discuss buoy placement activities

0926, 1005, 1031 – Calls with W. Mears to discuss probing progress, buoy placement, and Site coordination

1323 – Call with J. Laplante to discuss probing technique and notations.

1130 – Team call with Anchor and Benchmark to discuss probing progress, results, and probing notation nomenclature

1615 – Call with G. Miller and D Keith to discuss probing progress and scheduling for potential future cap maintenance activities.

### SITE PHOTOS/VIDEOS TAKEN: (attached below)

Three photographs with captions

### FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:

None

QA REPRESENTATIVE

Rick Coupe

HRS

10.5

DATE

3/16/2016





Photograph 1 – Probing activities in the East Cell.



Photograph 2 – Anchor location marker buoy placement.





Photograph 3 – Probing activities proceeding from pontoon barge.



## DAILY REPORT

PAGE 1 OF 3

|  |   |  |                       |                       |
|--|---|--|-----------------------|-----------------------|
| <b>PROJECT</b>                                 | San Jacinto River Waste Pits TCRA Maintenance   |  | <b>CONTRACT NO.</b>   |                       |
| <b>CONTRACTOR</b>                              | Benchmark Ecological Services, Inc.             |  | <b>SUPERINTENDENT</b> | N/A                   |
| <b>DAY OF WEEK &amp; DATE:</b>                 | Friday, March 18, 2016                          |  | <b>REPORT NO.</b>     | 06                    |
| <b>WEATHER</b>                                 | Overcast with variable winds from the Southeast |  | <b>TEMPERATURE</b>    | L: 68 H: 81 degrees F |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b> |   | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                       |                       |
| 2 – Benchmark Ecological Services              |   | n/a  |                       |                       |
| <b><u>TIDE INFORMATION:</u></b>                |   | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                       |                       |
| Time: n/a      Height: n/a                     |   | No incidents or near misses on this date                 |                       |                       |

**CHRONOLOGICAL ACCOUNT OF DAY'S WORK:**

0700 – Anchor QEA, Benchmark Ecological Services (Benchmark), and USEPA at Site

0720 – Health & safety meeting and discuss daily plans

0725 to 0745 – Benchmark continues probing onshore locations withing the East Cell .

0745 to 1045 – Benchmark continue probing the East Cell from pontoon boat

1050 – G. Miller demobilizes from site

1055 to 1145 – Probe locations completed. Final low tide visual inspection of area where skid steer was stuck, including adjacent areas Path of skid steer removal plotted with Trimble DGPS unit.

1200 – Complete investigation activities for the day and pack up site materials.

1230 – All personnel depart from the Site for the day

**Summary of Progress on this Date:**

- Probed approximately 60 points in East Cell. Completed scheduled probing activities

**Persons Onsite on this Date:**

Rick Coupe (Anchor QEA)

Gary Miller (USEPA)

Matthew Jay, Robert Moleski (Benchmark)

**Material Delivery Summary as of this Date:**

| Material | Units       | Delivered (units) | Delivery Verification Method | Preceding Delivered Total | Total Delivered for Project |
|----------|-------------|-------------------|------------------------------|---------------------------|-----------------------------|
| Type C   | cubic yards | 0                 | Truck bed measure            | 18-20                     | 18-20                       |



# DAILY REPORT

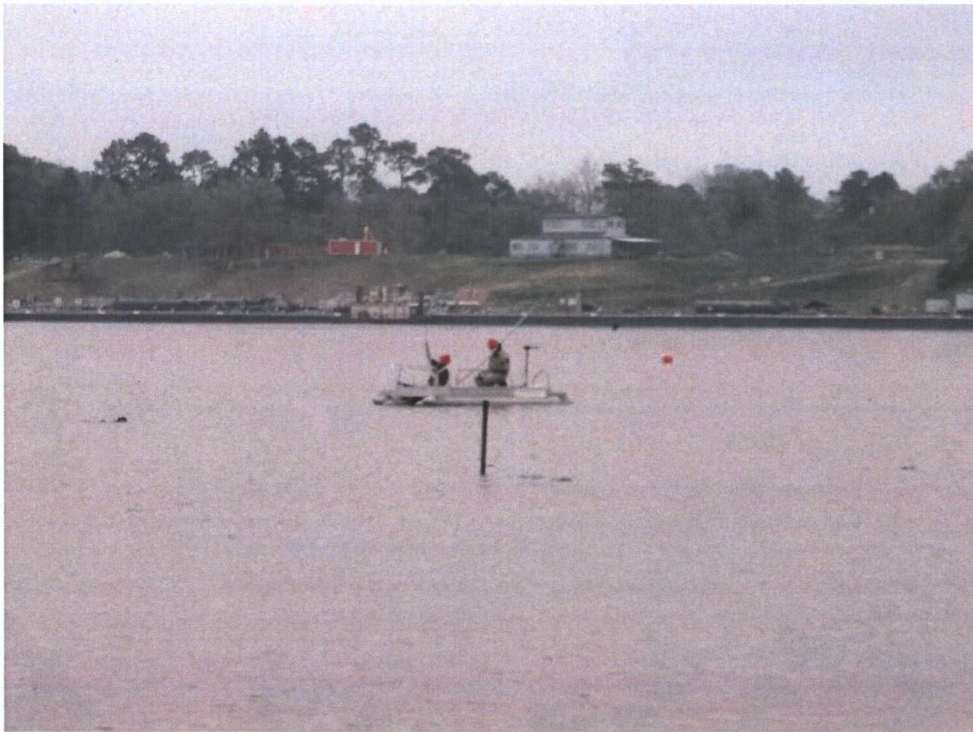
PAGE 2 OF 3

|  |  |  |  |            |  |   |  |     |  |   |  |      |  |           |  |
|--|--|--|--|------------|--|---|--|-----|--|---|--|------|--|-----------|--|
| <b>TESTS PERFORMED:</b>  |  |  |  |            |  | None  |  |     |  |   |  |      |  |           |  |
| <b>PHONE LOG:</b>  |  |  |  |            |  |   |  |     |  |   |  |      |  |           |  |
| 0839, 1200 – Calls with W. Mearsto discuss probing progress and Site activities.                                     |  |  |  |            |  |   |  |     |  |   |  |      |  |           |  |
| 1000 – Call with B. Johnston to discuss marine float barrier and regulatory buoy system component shipping schedule. |  |  |  |            |  |   |  |     |  |   |  |      |  |           |  |
| <b>SITE PHOTOS/VIDEOS TAKEN: (attached below)</b>  |  |  |  |            |  | <b>FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:</b> |  |     |  |   |  |      |  |           |  |
| Three photographs with captions  |  |  |  |            |  | None  |  |     |  |   |  |      |  |           |  |
| QA REPRESENTATIVE  |  |  |  | Rick Coupe |  |   |  | HRS |  | 6 |  | DATE |  | 3/18/2016 |  |



Photograph 1 – Probing activities in the East Cell.





Photograph 2 – Probing activities proceeding from pontoon barge in the East Cell.



Photograph 3 – Low tide visual inspection of location of skid steer.

**DAILY REPORT**PAGE 1 OF 3

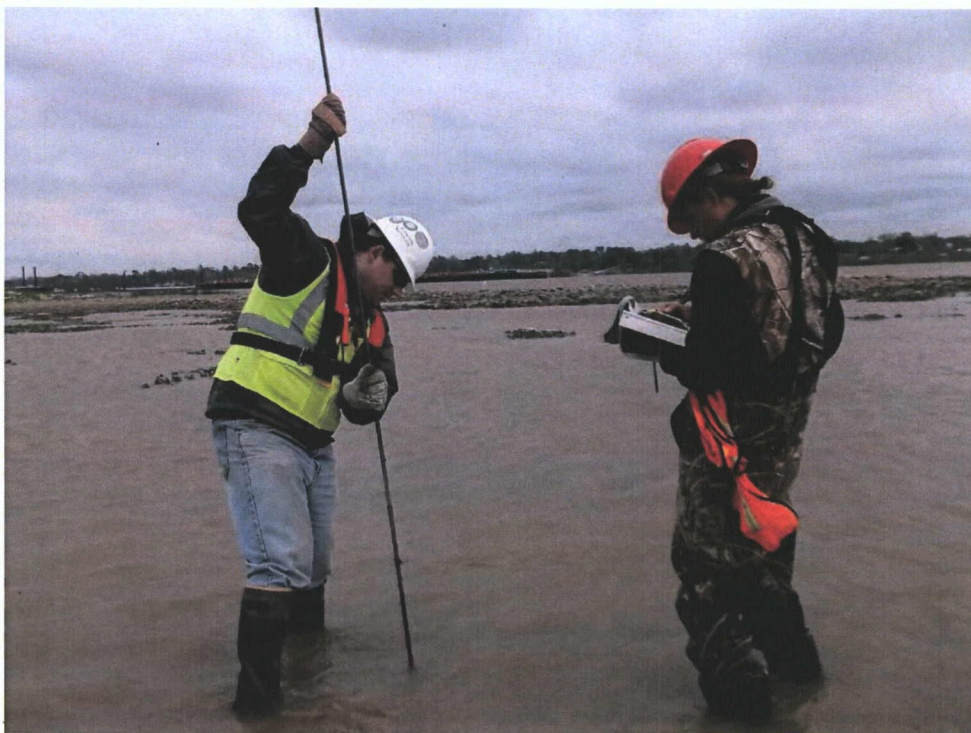
|  |   |                          |  |                                  |                                    |
|--|---|--------------------------|--|----------------------------------|------------------------------------|
| <b>PROJECT</b>   | San Jacinto River Waste Pits TCRA Maintenance         |                          |  | <b>CONTRACT NO.</b>              |                                    |
| <b>CONTRACTOR</b>  | Benchmark Ecological Services, Inc.                   |                          | <b>SUPERINTENDENT</b>                                    | N/A                              |                                    |
| <b>DAY OF WEEK &amp; DATE:</b>   | Saturday, March 19, 2016                              |                          |  | <b>REPORT NO.</b>                | 07                                 |
| <b>WEATHER</b>   | Overcast with gusts and high winds from the Northeast |                          | <b>TEMPERATURE</b>                                       | L: 53 H: 70 degrees F            |                                    |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b>   |   |                          | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                                  |                                    |
| 1 – Benchmark Ecological Services  |   |                          | n/a  |                                  |                                    |
| <b><u>TIDE INFORMATION:</u></b>  |   |                          | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                                  |                                    |
| Time: n/a      Height: n/a   |   |                          | No incidents or near misses on this date.                |                                  |                                    |
| <b><u>CHRONOLOGICAL ACCOUNT OF DAY'S WORK:</u></b>   |   |                          |  |                                  |                                    |
| 0845 – Anchor QEA, Benchmark Ecological Services (Benchmark) at Site.  |   |                          |  |                                  |                                    |
| 0900 – Health & safety meeting and discuss daily plans   |   |                          |  |                                  |                                    |
| 0905 to 1500– Benchmark and AQ staff carried out investigation of probe areas previously marked for additional probing and delineated areas potentially requiring maintenance. |   |                          |  |                                  |                                    |
| 1510 – All personnel depart the Site   |   |                          |  |                                  |                                    |
| <b><u>Summary of Progress on this Date:</u></b>  |   |                          |  |                                  |                                    |
| <ul style="list-style-type: none"><li>Revisited approximately 75 points in East Cell to confirm previous findings.</li></ul>   |   |                          |  |                                  |                                    |
| <b><u>Persons Onsite on this Date:</u></b>   |   |                          |  |                                  |                                    |
| Rick Coupe, Wendell Mears (Anchor QEA)   |   |                          |  |                                  |                                    |
| Robert Moleski (Benchmark)   |   |                          |  |                                  |                                    |
| <b><u>Material Delivery Summary as of this Date:</u></b>   |   |                          |  |                                  |                                    |
| <b>Material</b>  | <b>Units</b>  | <b>Delivered (units)</b> | <b>Delivery Verification Method</b>                      | <b>Preceding Delivered Total</b> | <b>Total Delivered for Project</b> |
| Type C   | cubic yards   | 0                        | Truck bed measure  | 18-20                            | 18-20                              |
| <b>TESTS PERFORMED:</b> None   |   |                          |  |                                  |                                    |
| <b><u>PHONE LOG:</u></b>   |   |                          |  |                                  |                                    |
| None.  |   |                          |  |                                  |                                    |



# DAILY REPORT

PAGE 2 OF 3

|   |               |   |   |      |           |
|---|---------------|---|---|------|-----------|
| <b>SITE PHOTOS/VIDEOS TAKEN: (attached below)</b> |               | <b>FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:</b> |   |      |           |
| Three photographs with captions                   |               | None  |   |      |           |
| QA REPRESENTATIVE                                 | Wendell Mears | HRS   | 6 | DATE | 3/19/2016 |
| QA REPRESENTATIVE                                 | Rick Coupe    | HRS   | 6 | DATE | 3/19/2016 |



Photograph 1 – Probing activities in the East Cell.





Photograph 2 – View of East Cell during low tide event.



Photograph 3 – View of shellfish growth on perimeter of East Cell.





## DAILY REPORT

PAGE 1 OF 4

|  |   |  |                     |                       |
|--|---|--|---------------------|-----------------------|
| <b>PROJECT</b>   | San Jacinto River Waste Pits TCRA Maintenance |  | <b>CONTRACT NO.</b> |                       |
| <b>CONTRACTOR</b>  | Benchmark Ecological Services, Inc.           | <b>SUPERINTENDENT</b>                                    | N/A                 |                       |
| <b>DAY OF WEEK &amp; DATE:</b>                           | Monday, March 21, 2016                        |  | <b>REPORT NO.</b>   | 08                    |
| <b>WEATHER</b>   | Sunny, light winds from southeast             |  | <b>TEMPERATURE</b>  | L. 45 H: 65 degrees F |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b>           |   | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                     |                       |
| 2 – Benchmark Ecological Services<br>4 – USA Environment |   | CAT 259D skid steer<br>CAT 324E excavator                |                     |                       |
| <b><u>TIDE INFORMATION:</u></b>                          |   | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                     |                       |
| Time: n/a      Height:      n/a                          |   | No incidents or near misses on this date                 |                     |                       |

### CHRONOLOGICAL ACCOUNT OF DAY'S WORK:

0705 – R. Coupe and H Samaha (Anchor QEA) arrive at Site.

0745 – USA Environment (USA) personnel onsite with skid steer, excavator, geotextile, and a truckload of road mats.

0810 – W Mears (Anchor QEA) onsite

0905 to 1215 – USA delivers concrete bases for the security camera systems USA and Anchor QEA mark locations of the three cameras on the central and southern berms.

1005 – Health and safety meeting

1040 – V Leos (USEPA) onsite

1100 to 1120 – Benchmark Ecological (Benchmark) personnel onsite

1135 to 1750 – Benchmark and AQ staff carry out investigation of probe areas previously marked for additional probing and delineate areas potentially requiring maintenance Probing personnel carry out probing by wading, pontoon barge, and 20' boat, depending on water depths at the respective locations investigated

1330 – Pea gravel delivered to Site.

1335 to 1530 – USA installs concrete bases at the three security camera locations Two of the posts, at CAM-01 and CAM-03, are also installed.

1530 – Benchmark departs site to launch boat for additional probing activities.

1530 – USA stages two temporary stockpiles of Type C armor rock at toe of central berm for use in maintenance activities

1610 – USEPA offsite.



## DAILY REPORT

PAGE 2 OF 4

1640 – USA offsite.

1655 – H. Samaha offsite.

1750 – Benchmark depart boat launch

1800 – R. Coupe offsite.

### Summary of Progress on this Date:

- Revisited approximately 90 probe locations in East Cell to confirm previous findings
- Began installation of three security camera systems

### Persons Onsite on this Date:

Rick Coupe, Wendell Mears, Holly Samaha (Anchor QEA)

Robert Moleski, Kevin Kicheline (Benchmark)

Valmichael Leos (USEPA)

USA Environment personnel

### Material Delivery Summary as of this Date:

| Material   | Units       | Delivered (units) | Delivery Verification Method | Preceding Delivered Total | Total Delivered for Project |
|------------|-------------|-------------------|------------------------------|---------------------------|-----------------------------|
| Type C     | cubic yards | 0                 | Truck bed measure            | 18-20                     | 18-20                       |
| Pea Gravel | Tons        | 14                | Truck bed measure            | 0                         | 14                          |

**TESTS PERFORMED:** None

### PHONE LOG:

1251, 1753, 1822 – R. Coupe calls with W. Mears concerning progress of probing

1533 – H. Samaha call with W. Mears about site progress

1543 – H. Samaha call with D. Keith about security camera installation on Tuesday, March 22

### SITE PHOTOS/VIDEOS TAKEN: (attached below)

Four photographs with captions

### FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:

None

|                   |               |     |      |      |           |
|-------------------|---------------|-----|------|------|-----------|
| QA REPRESENTATIVE | Wendell Mears | HRS | 6    | DATE | 3/21/2016 |
| QA REPRESENTATIVE | Rick Coupe    | HRS | 11   | DATE | 3/21/2016 |
| QA REPRESENTATIVE | Holly Samaha  | HRS | 9.75 | DATE | 3/21/2016 |



Photograph 1 – Probing activities in the East Cell.

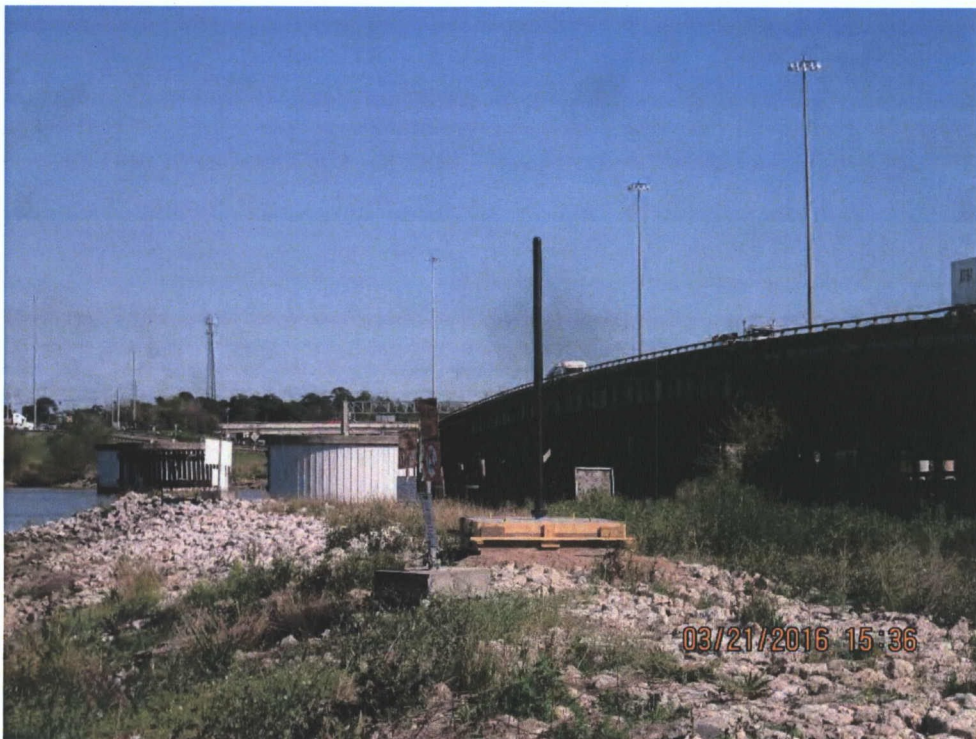


Photograph 2 – Installation of pea gravel at CAM-03 to provide a level platform for the security camera system.





Photograph 3 – Installation of security camera concrete base at CAM-02.



Photograph 4 – Security camera base and post at CAM-01.



## DAILY REPORT

PAGE 1 OF 5

|  |   |  |                       |    |
|--|---|--|-----------------------|----|
| <b>PROJECT</b>   | San Jacinto River Waste Pits TCRA Maintenance             |  | <b>CONTRACT NO.</b>   |    |
| <b>CONTRACTOR</b>  | Benchmark Ecological Services, Inc<br>USA Environment, LP | <b>SUPERINTENDENT</b>                                    | N/A                   |    |
| <b>DAY OF WEEK &amp; DATE:</b>   | Tuesday, March 22, 2016                                   |  | <b>REPORT NO.</b>     | 09 |
| <b>WEATHER</b>   | Cloudy, winds from south                                  | <b>TEMPERATURE</b>                                       | L: 50 H: 70 degrees F |    |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b>   |   | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                       |    |
| 2 – Benchmark Ecological Services<br>4 – USA Environment<br>3 – NCS  |   | CAT 259D skid steer<br>CAT 324E excavator                |                       |    |
| <b><u>TIDE INFORMATION:</u></b>  |   | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                       |    |
| Time: n/a      Height: n/a   |   | No incidents or near misses on this date.                |                       |    |
| <b><u>CHRONOLOGICAL ACCOUNT OF DAY'S WORK:</u></b>   |   |  |                       |    |
| <p>0650 to 0745 – Anchor QEA, USA Environment (USA), and Benchmark Ecological (Benchmark) personnel arrive at Site.</p> <p>0730 – USA's health and safety meeting.</p> <p>0735 – Anchor QEA cuts geotextile panels for East Cell maintenance activities</p> <p>0755 – Benchmark's health and safety meeting.</p> <p>0800 – USA loads road mats onto truck and removes from Site. USA repositions warning signs along southern and central berms into correct locations.</p> <p>0830 to 0850 – NCS personnel onsite for Site health &amp; safety meeting with H. Samaha. Will return later in the day with security camera equipment</p> <p>0810 to 1015 – Final confirmational probing of East Cell. Probe crew revisited approximately 10 locations that were difficult to probe during windy portions of the late afternoon of 3/21 to ensure accurate observations were recorded</p> <p>0840 – V. Leos (USEPA) onsite</p> <p>0905 – USA moves pea gravel stockpile to southern berm near east entrance ramp to West Cell.</p> <p>0920 – USA completes installation of posts for security cameras and removes wooden forms from the concrete bases.</p> <p>1105 to 1700 – Benchmark and AQ staff begin cap maintenance activities as described in the USEPA approved workplan.</p> <p>1215 to 1410 – NCS personnel back onsite, and they begin installation of security cameras at CAM-03. NCS realizes that the current posts stand 12' from the top of the concrete base even though the design documents specify a 15' height. Because the security camera equipment cannot fit on the shorter posts, NCS removes equipment and demobilizes from Site. 15' posts will be installed on Wednesday, March 23, and camera installation will resume afterwards</p> |   |  |                       |    |



## DAILY REPORT

PAGE 2 OF 5

1345 – Reporter from Baytown Sun escorted in vehicle by Valmichael Leos to area by CAM-03 during attempted camera equipment installation

1430 to 1510 – USA removes 12' posts from security camera concrete bases.

1535 – CAT 324E excavator removed from Site

1540 – H Samaha offsite.

1730 – All personnel offsite.

### Summary of Progress on this Date:

- Revisited approximately 10 probe locations in East Cell to confirm findings from 3/21.
- Completed cap maintenance activities at locations 0 – 10 as outlined in the USEPA approved workplan
- Continued installation of three security camera systems.

### Persons Onsite on this Date:

Rick Coupe, Holly Samaha (Anchor QEA)  
Matthew Jay, Kevin Kicheline (Benchmark)  
Valmichael Leos (USEPA)  
USA Environment personnel  
NCS personnel

### Material Delivery Summary as of this Date:

| Material   | Units       | Delivered (units) | Delivery Verification Method | Preceding Delivered Total | Total Delivered for Project |
|------------|-------------|-------------------|------------------------------|---------------------------|-----------------------------|
| Type C     | cubic yards | 0                 | Truck bed measure            | 18-20                     | 18-20                       |
| Pea Gravel | Tons        | 0                 | Truck bed measure            | 14                        | 14                          |

**TESTS PERFORMED:** None

### PHONE LOG:

0832, 0921, 1014 – H. Samaha call with W Mears about Site progress.  
1310, 1417, 1536 – H. Samaha call with W. Mears about 15' security camera posts.  
0705 – R. Coupe call with D Keith to discuss maintenance activities  
1024 – R. Coupe call with W. Mears to discuss maintenance and probe activities.

### SITE PHOTOS/VIDEOS TAKEN: (attached below)

Five photographs with captions

### FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:

None

|                   |            |     |      |      |           |
|-------------------|------------|-----|------|------|-----------|
| QA REPRESENTATIVE | Rick Coupe | HRS | 10.5 | DATE | 3/22/2016 |
|-------------------|------------|-----|------|------|-----------|



|                   |              |     |      |      |           |
|-------------------|--------------|-----|------|------|-----------|
| QA REPRESENTATIVE | Holly Samaha | HRS | 8.75 | DATE | 3/22/2016 |
|-------------------|--------------|-----|------|------|-----------|



Photograph 1 – Type C armor rock and pea gravel stockpiles on southern berm near east entrance ramp.





Photograph 2 – USA removing wooden forms from the concrete base of a security camera system.



Photograph 3 – USA removing 12' security camera posts from Site.





Photograph 4 – Benchmark performing cap maintenance.



Photograph 5 – Benchmark performing cap maintenance.



**DAILY REPORT**PAGE 1 OF 5

|   |  |  |                       |    |
|---|--|--|-----------------------|----|
| <b>PROJECT</b>  | San Jacinto River Waste Pits TCRA Maintenance                  |  | <b>CONTRACT NO.</b>   |    |
| <b>CONTRACTOR</b>   | Benchmark Ecological Services, Inc.<br>USA Environment, LP     | <b>SUPERINTENDENT</b>                                    | N/A                   |    |
| <b>DAY OF WEEK &amp; DATE:</b>  | Wednesday, March 23, 2016                                      |  | <b>REPORT NO.</b>     | 10 |
| <b>WEATHER</b>  | Cloudy, winds from southeast, light rain in the late afternoon | <b>TEMPERATURE</b>                                       | L: 66 H: 75 degrees F |    |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b>  |  | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                       |    |
| 2 – Benchmark Ecological Services<br>4 – USA Environment<br>3 – NCS   |  | CAT 259D skid steer                                      |                       |    |
| <b><u>TIDE INFORMATION:</u></b>   |  | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                       |    |
| Time: n/a      Height: n/a  |  | No incidents or near misses on this date.                |                       |    |
| <b><u>CHRONOLOGICAL ACCOUNT OF DAY'S WORK:</u></b>  |  |  |                       |    |
| <p>0700 to 0750 – Anchor QEA and Benchmark Ecological (Benchmark) personnel arrive at Site.</p> <p>0820 – Benchmark health and safety meeting.</p> <p>0830 to 1210 – Benchmark and AQ staff resume cap maintenance activities. Four locations completed. Two additional locations will be repaired on 3/24.</p> <p>0915 – USEPA onsite.</p> <p>0920 – USA onsite.</p> <p>0940 to 1030 – USA installs 15' poles on anchor blocks.</p> <p>1115 – USA demobilizes from Site.</p> <p>1200 – H. Samaha arrives onsite.</p> <p>1335 – USEPA demobilizes from Site.</p> <p>1340 to 1650 – Continued cap maintenance activities.</p> <p>1435 to 1445 – NCS personnel arrive onsite.</p> <p>1450 – NCS health and safety meeting.</p> <p>1455 to 1840 – NCS installs security camera components at CAM-03.</p> <p>1710 – Benchmark and R. Coupe offsite.</p> |  |  |                       |    |



## DAILY REPORT

PAGE 2 OF 5

1850 – NCS personel and H. Samaha offsite.

### Summary of Progress on this Date:

- Completed cap maintenance activities at locations 11, 12, and area that skid steer was disabled. An additional area discovered during the final probing was also repaired.
- USA installed 15' posts at the three security camera locations.
- NCS continued installation of security camera system.

### Persons Onsite on this Date:

Rick Coupe, Holly Samaha (Anchor QEA)  
Matthew Jay, Kevin Kicheline (Benchmark)  
Valmichael Leos (USEPA)  
USA Environment personnel  
NCS personnel

### Material Delivery Summary as of this Date:

| Material   | Units       | Delivered (units) | Delivery Verification Method | Preceding Delivered Total | Total Delivered for Project |
|------------|-------------|-------------------|------------------------------|---------------------------|-----------------------------|
| Type C     | cubic yards | 0                 | Truck bed measure            | 18-20                     | 18-20                       |
| Pea Gravel | Tons        | 0                 | Truck bed measure            | 14                        | 14                          |

TESTS PERFORMED: None

### PHONE LOG:

0800 – R. Coupe call with D. Keith to discuss maintenance activities.  
1114 – R. Coupe call with W. Mears and H. Samaha to discuss maintenance and probe activities.  
1700 – R. coupe call with W. Mears to discuss cap maintenance progress.  
1538, 1847 – H. Samaha call with W. Mears to discuss security camera installation progress.

### SITE PHOTOS/VIDEOS TAKEN: (attached below)

Five photographs with captions

### FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:

None

|                   |              |     |      |      |           |
|-------------------|--------------|-----|------|------|-----------|
| QA REPRESENTATIVE | Rick Coupe   | HRS | 10   | DATE | 3/23/2016 |
| QA REPRESENTATIVE | Holly Samaha | HRS | 6.75 | DATE | 3/23/2016 |



Photograph 1 – Type C armor rock loaded on pontoon barge for placement during cap maintenance.



Photograph 2 – Benchmark cutting geotextile for cap maintenance.





Photograph 3 – Cap maintenance at location of disabled skid steer area.



Photograph 4 – USA installing a 15' security camera post.





Photograph 5 – Partially installed security camera system at CAM-03.



**DAILY REPORT**PAGE 1 OF 5

|  |  |  |                     |                       |
|--|--|--|---------------------|-----------------------|
| <b>PROJECT</b>   | San Jacinto River Waste Pits TCRA Maintenance  |  | <b>CONTRACT NO.</b> |                       |
| <b>CONTRACTOR</b>  | Benchmark Ecological Services, Inc.<br>USA Environment, LP                               | <b>SUPERINTENDENT</b>                                    | N/A                 |                       |
| <b>DAY OF WEEK &amp; DATE:</b>   | Thursday, March 24, 2016   |  | <b>REPORT NO.</b>   | 11                    |
| <b>WEATHER</b>   | Thunderstorms in the morning, sunny and clear in the afternoon. NNW winds at 15-20 knots |  | <b>TEMPERATURE</b>  | L: 48 H: 69 degrees F |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b>   |  | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                     |                       |
| 2 – Benchmark Ecological Services<br>5 – NCS<br>2 – Dorskocil  |  |  |                     |                       |
| <b><u>TIDE INFORMATION:</u></b>  |  | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                     |                       |
| Time: n/a      Height: n/a   |  | No incidents or near misses on this date.                |                     |                       |
| <b><u>CHRONOLOGICAL ACCOUNT OF DAY'S WORK:</u></b>   |  |  |                     |                       |
| <p>0700 to 0810 – Anchor QEA and Benchmark Ecological (Benchmark) personnel arrive at Site.</p> <p>0830 – Benchmark health and safety meeting.</p> <p>0840 to 1305 – Benchmark and AQ staff resume cap maintenance activities. Five locations completed. Two additional locations were not accessible due to high winds.</p> <p>0920 to 0930 – NCS personnel arrive at Site.</p> <p>0935 – NCS health and safety meeting.</p> <p>0940 – NCS begins security camera installation at CAM-01.</p> <p>0950 to 1045 – Lightning in the area. All site activities are shut down, and personnel take shelter in vehicles.</p> <p>1045 to 1835 – NCS continues security camera installation at all three locations.</p> <p>1250 to 1625 – Continued cap maintenance activities.</p> <p>1500 to 1615 – Dorskocil onsite to deploy additional buoys.</p> <p>1650 – Benchmark offsite.</p> <p>1710 – R. Coupe offsite.</p> <p>1920 – NCS and H. Samaha offsite.</p> |  |  |                     |                       |
| <b><u>Summary of Progress on this Date:</u></b>  |  |  |                     |                       |
| <ul style="list-style-type: none"><li>Completed cap maintenance activities at 5 additional locations identified during QC review of probing data.</li></ul>  |  |  |                     |                       |



## DAILY REPORT

PAGE 2 OF 5

- Dorskocil installed 12 additional buoys.
- NCS continued installation of security camera system.

### Persons Onsite on this Date:

Rick Coupe, Holly Samaha (Anchor QEA)  
Matthew Jay, Kevin Kicheline (Benchmark)  
Valmichael Leos (USEPA)  
NCS personnel  
Dorskocil personnel

### Material Delivery Summary as of this Date:

| Material   | Units       | Delivered (units) | Delivery Verification Method | Preceding Delivered Total | Total Delivered for Project |
|------------|-------------|-------------------|------------------------------|---------------------------|-----------------------------|
| Type C     | cubic yards | 0                 | Truck bed measure            | 18-20                     | 18-20                       |
| Pea Gravel | Tons        | 0                 | Truck bed measure            | 14                        | 14                          |

**TESTS PERFORMED:** None

### PHONE LOG:

0844 – H. Samaha call with D. Keith to discuss 3/23 daily report and camera installation activities.  
0855, 1154, 1210, 1700 – R. Coupe calls with W. Mears to discuss maintenance activities.  
1344, 1710 – H. Samaha calls with W. Mears to discuss security camera installation progress.  
1633 – H. Samaha call with V. Leos to discuss security camera installation progress.  
1635 – R. Coupe call with V. Leos to discuss maintenance activity progress.

### SITE PHOTOS/VIDEOS TAKEN: (attached below)

Five photographs with captions

### FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:

None

|                   |              |     |    |      |           |
|-------------------|--------------|-----|----|------|-----------|
| QA REPRESENTATIVE | Rick Coupe   | HRS | 9  | DATE | 3/24/2016 |
| QA REPRESENTATIVE | Holly Samaha | HRS | 12 | DATE | 3/24/2016 |





Photograph 1 – Type C armor rock loaded on pontoon barge for placement during cap maintenance.

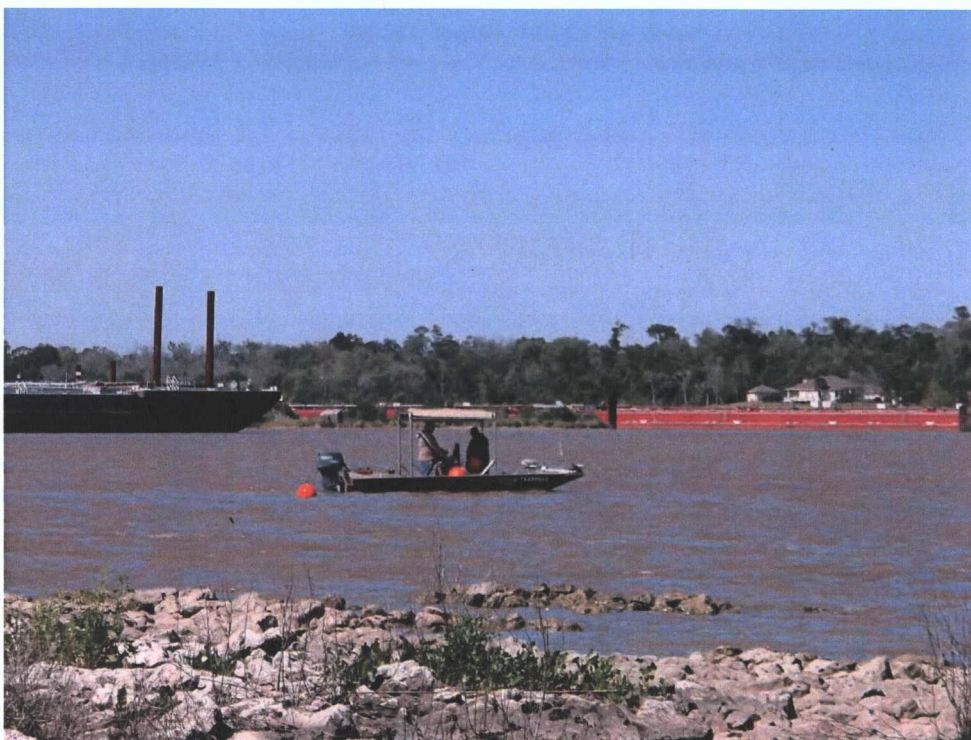


Photograph 2 – Placing type C armor stone during cap maintenance activities.





Photograph 3 – View of cap repair location at low tide.



Photograph 4 – Dorskocil installing additional buoys around perimeter of cap.





Photograph 5 – NCS installing security camera system at CAM-01.

**DAILY REPORT**PAGE 1 OF 2

|   |   |                          |  |                                  |                                    |
|---|---|--------------------------|--|----------------------------------|------------------------------------|
| <b>PROJECT</b>  | San Jacinto River Waste Pits TCRA Maintenance |                          |  | <b>CONTRACT NO.</b>              |                                    |
| <b>CONTRACTOR</b>   | Network Cabeling Services (NCS)               |                          | <b>SUPERINTENDENT</b>                                    | N/A                              |                                    |
| <b>DAY OF WEEK &amp; DATE:</b>  | Friday, March 25, 2016                        |                          |  | <b>REPORT NO.</b>                | 12                                 |
| <b>WEATHER</b>  | Sunny and clear with calm winds               |                          | <b>TEMPERATURE</b>                                       | L: 48 H: 68 degrees F            |                                    |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b>                                    |   |                          | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                                  |                                    |
| 4 – NCS   |   |                          |  |                                  |                                    |
| <b><u>TIDE INFORMATION:</u></b>   |   |                          | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                                  |                                    |
| Time: n/a      Height: n/a  |   |                          | No incidents or near misses on this date.                |                                  |                                    |
| <b><u>CHRONOLOGICAL ACCOUNT OF DAY'S WORK:</u></b>                                |   |                          |  |                                  |                                    |
| 0800 to 0840 – Anchor QEA and NCS personnel arrive at Site.                       |   |                          |  |                                  |                                    |
| 0815 – Health and safety meeting.   |   |                          |  |                                  |                                    |
| 0820 to 1805 – NCS completes security camera installation at all three locations. |   |                          |  |                                  |                                    |
| 1820 – NCS and H. Samaha offsite.   |   |                          |  |                                  |                                    |
| <b><u>Summary of Progress on this Date:</u></b>                                   |   |                          |  |                                  |                                    |
| • NCS completed installation of security camera system.                           |   |                          |  |                                  |                                    |
| <b><u>Persons Onsite on this Date:</u></b>  |   |                          |  |                                  |                                    |
| Holly Samaha (Anchor QEA)   |   |                          |  |                                  |                                    |
| NCS personnel   |   |                          |  |                                  |                                    |
| <b><u>Material Delivery Summary as of this Date:</u></b>                          |   |                          |  |                                  |                                    |
| <b>Material</b>   | <b>Units</b>                                  | <b>Delivered (units)</b> | <b>Delivery Verification Method</b>                      | <b>Preceding Delivered Total</b> | <b>Total Delivered for Project</b> |
| Type C  | cubic yards                                   | 0                        | Truck bed measure  | 18-20                            | 18-20                              |
| Pea Gravel  | Tons  | 0                        | Truck bed measure  | 14                               | 14                                 |
| <b>TESTS PERFORMED:</b> None  |   |                          |  |                                  |                                    |
| <b><u>PHONE LOG:</u></b>  |   |                          |  |                                  |                                    |
| None.   |   |                          |  |                                  |                                    |
| <b><u>SITE PHOTOS/VIDEOS TAKEN:</u> (attached below)</b>                          |   |                          | <b><u>FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:</u></b>   |                                  |                                    |
| Two photographs with captions   |   |                          | None   |                                  |                                    |
| <b>QA REPRESENTATIVE</b>  | Holly Samaha                                  |                          | <b>HRS</b>   | 10.25                            | <b>DATE</b> 3/25/2016              |





Photograph 1 – Fully installed security camera at CAM-02.



Photograph 2 – NCS wiring security camera system at CAM-01.

**DAILY REPORT**PAGE 1 OF 3

|  |   |  |                     |                       |
|--|---|--|---------------------|-----------------------|
| <b>PROJECT</b>                                 | San Jacinto River Waste Pits TCRA Maintenance |  | <b>CONTRACT NO.</b> |                       |
| <b>CONTRACTOR</b>                              | Benchmark Ecological Services, Inc.           | <b>SUPERINTENDENT</b>                                    | N/A                 |                       |
| <b>DAY OF WEEK &amp; DATE:</b>                 | Thursday, March 31, 2016                      |  | <b>REPORT NO.</b>   | 13                    |
| <b>WEATHER</b>                                 | Light rain in the morning; sunny afternoon    |  | <b>TEMPERATURE</b>  | L: 72 H: 81 degrees F |
| <b>NUMBER/CLASS OF CONTRACTOR'S PERSONNEL:</b> |   | <b>MAJOR EQUIPMENT ON JOB (Size/capacity and hours):</b> |                     |                       |
| 2 – Benchmark<br>2 – Dorskocil                 |   |  |                     |                       |
| <b><u>TIDE INFORMATION:</u></b>                |   | <b><u>HEALTH AND SAFETY INFORMATION:</u></b>             |                     |                       |
| Time: n/a      Height:      n/a                |   | No incidents or near misses on this date.                |                     |                       |

**CHRONOLOGICAL ACCOUNT OF DAY'S WORK:**

0950 – Anchor QEA onsite. Benchmark assessing vessel mobility in maintenance areas.

1005 – Health and safety meeting. Discuss daily plans.

1020 to 1505 – Benchmark and Anchor QEA complete cap maintenance activities in East Cell and security camera verification by boat.

1505 to 1530 – Benchmark and Anchor QEA take GPS measurements of buoys around Site perimeter.

1530 – Dorskocil begins repositioning buoys that drifted out of place. Anchor QEA conducts security camera verification by land.

1600 – Benchmark and Anchor QEA offsite.

**Summary of Progress on this Date:**

- Benchmark completed cap maintenance activities in East Cell.
- Dorskocil repositioned buoys that had drifted out of place.
- Anchor QEA completed security camera verification.

**Persons Onsite on this Date:**

Holly Samaha (Anchor QEA)

Robert Moleski, Kevin Kichiline (Benchmark)

Dorskocil personnel

**Material Delivery Summary as of this Date:**

| Material   | Units       | Delivered (units) | Delivery Verification Method | Preceding Delivered Total | Total Delivered for Project |
|------------|-------------|-------------------|------------------------------|---------------------------|-----------------------------|
| Type C     | cubic yards | 0                 | Truck bed measure            | 18-20                     | 18-20                       |
| Pea Gravel | Tons        | 0                 | Truck bed measure            | 14                        | 14                          |





**DAILY REPORT**

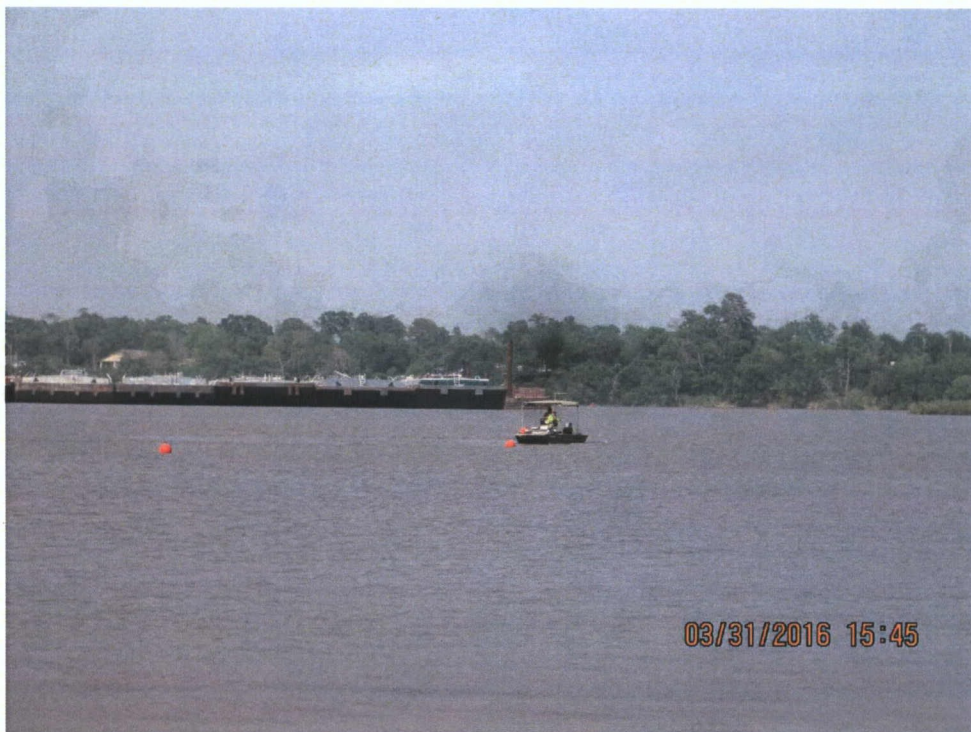
PAGE 2 OF 3

|  |              |     |   |      |           |
|--|--------------|-----|---|------|-----------|
| TESTS PERFORMED:   | None         |     |   |      |           |
| <b>PHONE LOG:</b><br>1208, 1307, 1535 – H. Samaha call with WM Security for security camera verifications. |              |     |   |      |           |
| <b>SITE PHOTOS/VIDEOS TAKEN:</b> (attached below)  |              |     | <b>FORCE ACCOUNT WORK/ CHANGES ENCOUNTERED:</b> |      |           |
| Two photographs with captions  |              |     | None  |      |           |
| QA REPRESENTATIVE  | Holly Samaha | HRS | 6.25  | DATE | 3/31/2016 |



Photograph 1 – Benchmark performing cap maintenance in East Cell.





Photograph 2 – Dorskocil repositioning Site perimeter buoys.



**ATTACHMENT 2**  
**RESPONDENTS' MARCH 15, 2016,**  
**PROBING WORK PLAN**

---



614 Magnolia Avenue  
Ocean Springs, Mississippi 39564  
Phone 228.818.9626  
Fax 228 818.9631

---

March 15, 2016

Gary Miller, Remedial Project Manager  
U.S. Environmental Protection Agency, Region 6  
Superfund Division (6SF-RA)  
1445 Ross Avenue, Suite 1200  
Dallas, Texas 75202-2733

Re: Plan for Additional Cap Probing on the Time Critical Removal Action Armored Cap,  
San Jacinto River Waste Pits Superfund Site, Channelview, Texas

Dear Gary:

As part of the Time Critical Removal Action (TCRA) for the San Jacinto River Waste Pits (SJRWP) Site (Site), an armored cap was constructed adjacent to the San Jacinto River north of the Interstate 10 (I-10) bridge crossing. The cap has been subject to periodic inspections to document the presence and extent of armor rock, including visual inspection and bathymetric/topographic surveys. During the past several months, more detailed inspections of the cap have been conducted by the U.S. Environmental Protection Agency (USEPA) and the Respondents for the Site, McGinnes Industrial Maintenance Corporation and International Paper Company (Respondents).

In light of our shared interest to ensure the protectiveness of the armored cap, the Respondents propose to conduct additional armor rock thickness probing to augment the data collected during the construction phase. These data will tighten the probing grid and provide a more robust assessment of the armor rock thickness. The following describes the proposed approach and procedures for completing the work, which will be added as additional work under Section 2.2 of the Operations, Monitoring and Maintenance Plan for the Time Critical Removal Action.

---



## WORK APPROACH

The planned probe layout is provided on the attached Figure 1. Proposed new probe locations, depicted in dark green, will be spaced roughly equidistant from the post-construction probe locations shown in light green. Approximately 400 new locations are proposed for probing.

A differential GPS unit will be used to locate proposed sample stations. Once on station, a steel rod will be used to probe the armor cap. The probing team will use a 1/2- to 5/8-inch-diameter steel rod to measure armor thickness by penetrating the armor material until reaching the underlying geotextile fabric. If the probing team is unable to reach the geotextile below the armor material, the team will move the probing location a minimum distance possible to achieve successful penetration. Data, including waypoint IDs, thickness of armor cap, and sample times, will be recorded for each station.

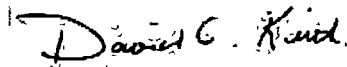
A field summary report will be prepared and will include a figure showing each probing location. A table will also be provided with coordinates for each sample location.

## SCHEDULE

The proposed work will begin during the week of March 14, 2016, subject to USEPA approval, if weather, tide, and access conditions allow those activities. Probing work is anticipated to take less than 1 week to complete.

Please let us know if you have any concerns with the proposed vegetation control measures, and do not hesitate to contact me if you would like to discuss anything.

Sincerely,



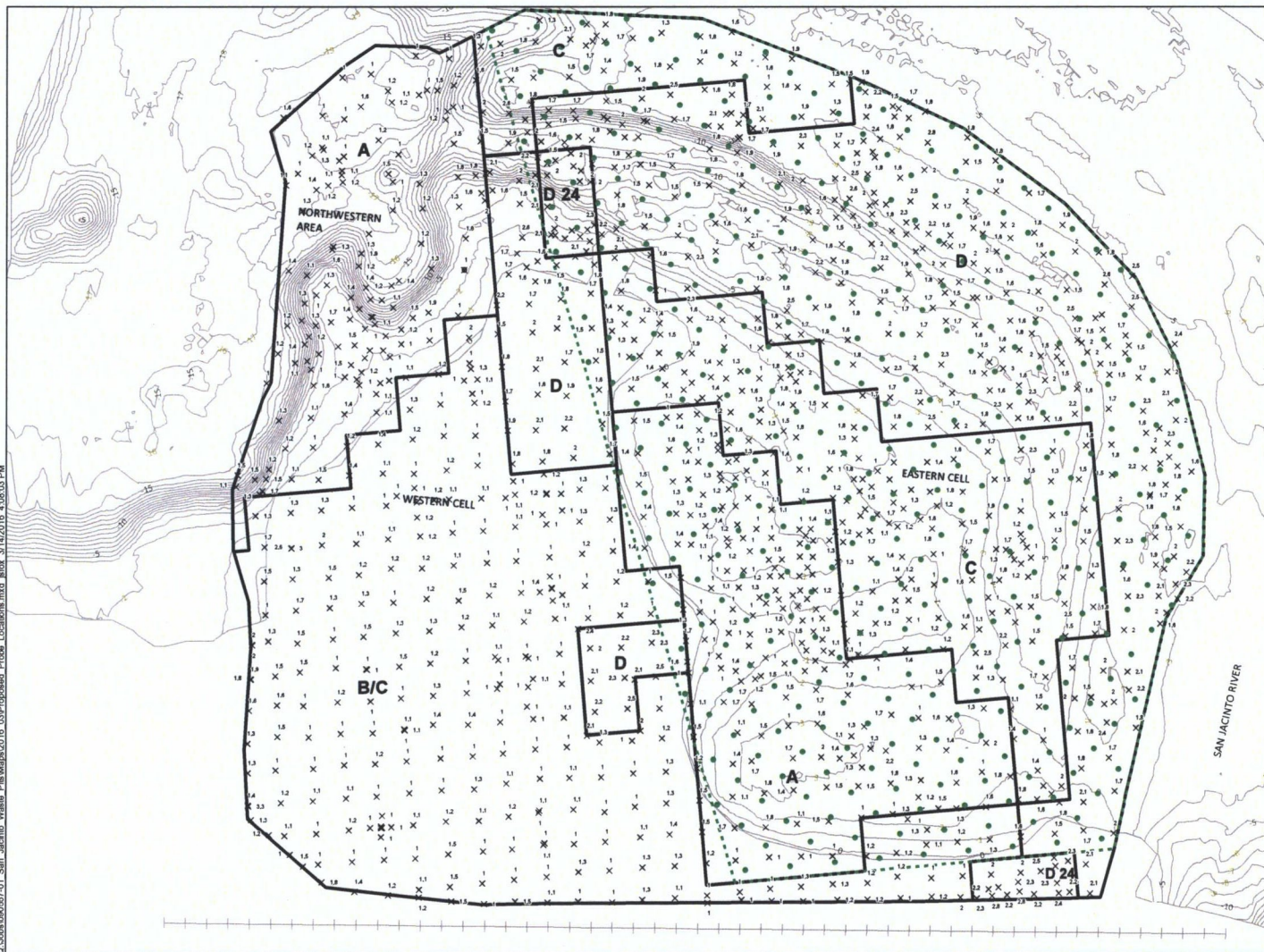
David C. Keith  
Project Coordinator  
Anchor QEA, LLC

---

Cc: Phil Slowiak, International Paper Company  
Dave Moreira, McGinnes Industrial Maintenance Corporation  
John Laplante, Anchor QEA, LLC



C:\ch01\000567-01 San Jacinto Waste Pits\Mapa\2016\_03\Proposed\_Probe\_Locations.mxd 3/14/2016 4:08:03 PM



#### LEGEND

- Proposed Probing Locations
- x Probing Location and Thickness; Meets or Exceeds Minimum
- Pre-Construction Contour, February 15 and 21, 2011 (1-foot interval)
- - - Proposed New Probing Survey Boundary

#### Minimum Armor Thickness in Feet:

|          |     |
|----------|-----|
| Area A   | 1   |
| Area B/C | 1   |
| Area C   | 1   |
| Area D   | 1.5 |
| Area D24 | 2   |



**ATTACHMENT 3**  
**USEPA MARCH 16, 2016, PROBING**  
**PLAN APPROVAL**

---



**From:** Miller, Gary  
**To:** John Laplante; David Keith  
**Cc:** Moreira, Dave; Phil Slowiak; Sanchez, Carlos; Foster, Anne; Satya Dwivedula; Bob Allen; Linda Henry; Garry McMahan; Leah Oberlin (loberlin@poha.com); Walters, Donn  
**Subject:** RE: Letter\_to\_Miller\_Proposed Additional Cap Probing\_SJRWP 03-15-16.pdf  
**Date:** Tuesday, March 15, 2016 2:14:22 PM  
**Attachments:** Letter to Miller Proposed Additional Cap Probing\_SJRWP 03-15-16.pdf

---

David,

The EPA approves the attached probing plan for the San Jacinto River Waste Pits Site. As we discussed, work will begin on 3/16/16, weather and tide permitting.

Regards,

Gary Miller  
Remedial Project Manager  
EPA Region 6 – Superfund Division (6SF-RA)  
214-665-8318  
miller.garyg@epa.gov

-----Original Message-----

From: John Laplante [mailto:[jlaplante@anchorqea.com](mailto:jlaplante@anchorqea.com)]  
Sent: Tuesday, March 15, 2016 2:12 PM  
To: Miller, Gary <Miller.Garyg@epa.gov>  
Cc: David Keith <dkeith@anchorqea.com>, Moreira, Dave <Dmoreira@wm.com>; Phil Slowiak <philip.slowiak@ipaper.com>  
Subject: Letter\_to\_Miller\_Proposed Additional Cap Probing\_SJRWP 03-15-16.pdf

Hi Gary -

Attached please find our proposal to conduct additional probing at the SJRWP. Let us know if you have questions

Thanks

John Laplante  
Anchor QEA

**ATTACHMENT 4**  
**MARCH 19, 2016, LOW-TIDE VISUAL**  
**INSPECTION PHOTOGRAPHIC LOG**

---





Photograph 01 Shell hash and debris in D rock voids—March 19, 2019



Photograph 02 Shell hash and debris in D rock voids—March 19, 2016



Photograph 03 Extensive shell growth in D rock areas—March 19, 2016



Photograph 04 Extensive shell growth in D rock areas—March 19, 2016





Photograph 05 Cement-like compaction in A rock areas—March 19, 2016



Photograph 06 Cement-like compaction in A rock areas—March 19, 2016



Photograph 07 Cement-like compaction in A rock areas—March 19, 2016



Photograph 08 Cement-like compaction in A rock areas—March 19, 2016



**ATTACHMENT 5  
RESPONDENTS' MARCH 21, 2016,  
ARMORED CAP MAINTENANCE WORK  
PLAN**

---



614 Magnolia Avenue  
Ocean Springs, Mississippi 39564  
Phone 228.818.9626  
Fax 228 818.9631

---

March 21, 2015

Gary Miller, Remedial Project Manager  
U.S. Environmental Protection Agency, Region 6  
Superfund Division (6SF-RA)  
1445 Ross Avenue, Suite 1200  
Dallas, Texas 75202-2733

Re: Work Plan for Rock Placement on the Time Critical Removal Action  
Armored Cap, San Jacinto River Waste Pits Superfund Site, Channelview, Texas

Dear Gary:

This letter provides a summary of the inspection of the armored cap at the San Jacinto River Waste Pits Superfund Site (Site) described in a letter to you dated March 14, 2016, and approved by you on March 15, 2016. The inspection consisted of probing over the eastern cell of the armored cap on March 16, 17, 18, 19, and 21, 2016. A visual inspection of the armored cap was also performed during an extreme low tide event on Saturday, March 19, 2016, along with additional probing for Quality Assurance/Quality Control purposes.

The results of the probing and visual inspection identified several discrete areas (e.g. 1' x 1') where geotextile was exposed, as summarized in Table 1 and shown on the attached Figure 1.

### **Placement of Geotextile and Armor Rock**

Armor rock will be placed over each maintenance location shown on Figure 1 to assure that the design thickness of armor rock is present at all locations. As part of the Time Critical Removal Action planning for cap maintenance, two stockpiles of armor rock (armor rock C and armor rock D) were purchased and staged near the Site, and armor rock C will be used for this maintenance activity. Armor rock C is larger than or equivalent to the size of the



armor rock used in these locations of the armored cap, and it will provide long-term reliability of the cap surface from currents, winds, and waves in the area.

As you are aware, a skid steer front-end loader became disabled on the armored cap and the Respondents will place additional geotextile and armor rock in this area. In addition, the geotextile edge identified at Location 11 will also be addressed by placement of geotextile and armor rock.

Work will be conducted by the Respondents' on-call contractor, USA Environment, LP (USA), and Benchmark Ecological Services. Access to the Work Areas from the land side is necessary due to shallow water conditions. Work will be conducted as follows:

- We believe there is currently sufficient armor rock C on the stockpile area at the entrance to the cap to complete the required maintenance; however, additional rock will be delivered if needed. Rock will be delivered using dump trucks to the stockpile area at the southeastern entrance to the armored cap outside of the TxDOT right-of-way.
- Small equipment will be used to move rock from the delivery location to the shoreline near the Work Area.
- The rock will be transferred from the stockpile into the Work Areas using a small pontoon boat and unloaded from the pontoon boat over the Work Areas to attain the design thickness of armor material. This process is similar to the process that was used for maintenance activities performed in the eastern cell the week of March 14, 2016.

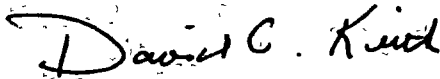
The construction duration is estimated to be 1 to 2 days.

---

## Schedule

With the U.S. Environmental Protection Agency's approval of this Work Plan, we plan to mobilize and complete the maintenance work on March 22 and 23, 2016, assuming weather, tide, and access conditions allow those activities. Please do not hesitate to contact me if you would like to discuss anything.

Sincerely,



David C. Keith  
Project Coordinator  
Anchor QEA, LLC

cc: Phil Slowiak, International Paper Company  
Dave Moreira, McGinnes Industrial Maintenance Corporation  
John Laplante, Anchor QEA, LLC

---



## **ATTACHMENT 6**

# **USEPA MARCH 21, 2016, ARMORED CAP MAINTENANCE WORK PLAN APPROVAL**

---

**From:** Miller, Gary  
**To:** David Keith  
**Cc:** Phil Slowiak; Moreira, Dave; John Laplante; Wendell Mears; Holly Samaha; Rick Coupe; Valmichael Leos; Sanchez, Carlos; Meyer, John; Satya Dwivedula; Bob Allen; Linda Henry; Garry McMahan; Leah Oberlin (loberlin@poha.com); Foster, Anne; Walters, Donn  
**Subject:** FW: San Jacinto Maintenance Work Plan  
**Date:** Monday, March 21, 2016 5:44:46 PM  
**Attachments:** Work Plan for Additional Rock Placement March 2016.pdf

---

David,

The EPA has reviewed and approves the attached work plan. As we discussed, the work will begin on March 22, 2016, and will take one to two days to complete.

Regards,

Gary Miller  
Remedial Project Manager  
EPA Region 6 – Superfund Division (6SF-RA)  
214-665-8318  
[miller.garyg@epa.gov](mailto:miller.garyg@epa.gov)

---

**From:** David Keith [mailto:[dkeith@anchorqea.com](mailto:dkeith@anchorqea.com)]  
**Sent:** Monday, March 21, 2016 5:19 PM  
**To:** Miller, Gary <[Miller.Garyg@epa.gov](mailto:Miller.Garyg@epa.gov)>  
**Cc:** Phil Slowiak <[philip.slowiak@ipaper.com](mailto:philip.slowiak@ipaper.com)>; Dave Moreira (dmoreira@wm.com) <[dmoreira@wm.com](mailto:dmoreira@wm.com)>; John Laplante <[jlaplante@anchorqea.com](mailto:jlaplante@anchorqea.com)>; Wendell Mears <[wmears@anchorqea.com](mailto:wmears@anchorqea.com)>; Holly Samaha <[hsamaha@anchorqea.com](mailto:hsamaha@anchorqea.com)>; Rick Coupe <[rcoupe@anchorqea.com](mailto:rcoupe@anchorqea.com)>; Leos, Valmichael <[Leos.Valmichael@epa.gov](mailto:Leos.Valmichael@epa.gov)>  
**Subject:** San Jacinto Maintenance Work Plan

Gary – As discussed, please review the attached subject document. With your approval we would like to start this work tomorrow morning. Please don't hesitate to contact me if you would like to discuss anything.

Thank you,  
David

**David Keith**  
**Anchor QEA, LLC**  
**614 Magnolia Avenue**  
**Ocean Springs, MS 39564**

**Phone:** 228-220-1156  
**Cell:** 228-224-2983  
**[dkeith@anchorqea.com](mailto:dkeith@anchorqea.com)**

**ANCHOR QEA, LLC**



[www.anchorqea.com](http://www.anchorqea.com)

Please consider the environment before printing this email.

This electronic message transmission contains information that may be confidential and/or privileged work product prepared in anticipation of litigation. The information is intended for the use of the individual or entity named above. If you are not the intended recipient, please be aware that any disclosure, copying, distribution or use of the contents of this information is prohibited. If you have received this electronic transmission in error, please notify us by telephone at (228) 818-9626.